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**REMARKS**

Claims 1-19 are pending in the present application. New claims 18 and 19 have been added.

Claims 1, 2, 5, 6 and 11 were rejected under 35 USC §102(b) as being anticipated by US Patent No. 5,775,158 (*Hensley*).

Claims 1-6 and 11-13 were rejected under 35 USC §103(a) as being unpatentable over *Hensley* in view of US Patent No. 5,768,935 (*Owens*).

Claims 7-10 and 14-17 were rejected under 35 USC §103(a) as being unpatentable over *Hensley* and *Owens* in further view of US Patent No. 4,637,242 (*Undin*).

Claim 1 is directed to an appliance for a mechanical sealing of hollow hoses and elastic material with sealing means which is made of a plastically deformable material. The appliance of claim 1 has numerous limitations including the limitations of a "sealing means" in the "form of a sleeve", "at least one bar which projects toward the other jaw", the at least one bar "makes an indentation in the sleeve and the hose" and "a cutting means which projects toward the other jaw" which "makes a cutting indication in the sleeve". *Hensley* does not teach or suggest an appliance with all the limitations in claim 1.

First, the inventive appliance includes the limitation of a "sealing means" in the "form of a sleeve". There is no sealing means taught or suggested in *Hensley*. *Hensley* only teaches a method of cutting high tencel strength cable and steel rods. There is no sealing means. Further, there is nothing in *Hensley* to teach or suggest a sealing means.

Second, the appliance of claim 1 has numerous limitations including that at least one of the jaws has at least one bar which projects toward the other jaw. There is no such bar taught or suggested by *Hensley*. The Examiner asserts that elements 26-28 of *Hensley* are equivalent to the straight bars of the present invention. A close examination of, for example Figure 10 of *Hensley*, discloses that Figures 26 and 28 are end plates each with a U-shape open aperture

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sized to the diameter of the cable or rod being cut. The end plates of *Hensley* do not make indentations on the wire or rod. Rather, they surround the wire and rod and protect against deformation. Thus, there is no teaching or suggestion in *Hensley* for at least one of the jaws to have at least one bar which projects toward the other jaw which when the jaws are moving toward each other makes an indentation in the sleeve and the hose. In fact, *Hensley* teaches away from such a device as the plates in *Hensley* have apertures that surround the cable. See, e.g. *Hensley* at column 3, lines 18-25 and Figure 10. The purpose of the end plates is to support the cable while it is being cut and to prevent deformation or spreading of the cable. See, e.g. *Hensley* at column 3, lines 26-52. Preventing deformation is the opposite of crimping, which is in fact plastic deformation.

Third, claim 1 contains the additional limitation that the device has a cutting means which projects towards the other jaw in which when the jaws are moving toward each other makes a cutting indication the sleeve and hose. *Hensley* does not teach or suggest a device with all the limitations of claim 1 including a cutting means which makes a cutting indication. In *Hensley*, the ram assembly forces the movable jaw toward the stationary jaw so that the cable or rod placed between the die structures will be fractured. Rather than putting a cutting indication on the hose and on the sleeve, the entire cable or bar is fractured. See, e.g. *Hensley* at column 2, lines 63-67.

Fourth, the present appliance crimps the hose and the sealing means. *Hensley* does not teach or suggest crimping, let alone any manner of crimping. *Hensley* is a cutting die which can be placed into a crimping tool instead of the die which came with the tool. Accordingly, *Hensley* does not have any structures for crimping and does not teach or suggest any such structures. For the reasons discussed above, *Hensley* does not teach or suggest all the limitations in claim 1. Thus, claim 1 as well as claims 2-18 which depend therefrom are patentable.

Claim 2 has all the limitations of claim 1. For the reasons discussed above, claim 2 is patentable. Further, claim 2 contains the additional limitation that the device has at least two

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straight bars. *Hensley* does not disclose two straight bars for crimping. Elements 26 and 27 which the Examiner contends are straight bars are instead end plates. As discussed above, the end plates can not be equated with bars. The end plates have apertures for receiving the wire or rod prevent deformation. There is no crimping by the end plates. See, e.g. *Hensley* at Figure 10 and column 3, lines 18-25. *Hensley* does not teach or suggest a device with all the limitations of claim 2. Thus, claim 2 and claims 11, 14 and 17-19 which depend therefrom are patentable.

Claims 3 and 11 contain all the limitations of claim 1. Thus, for the reasons discussed above 3 and 11 are patentable. Further, claims 3 and 11 include additional limitations including the limitation that the cutting means forms a substantially straight cutting edge which projects to a greater extent than the bars. First, as discussed above there are no bars taught or suggested by *Hensley* and the end plates of *Hensley* cannot be equated with the straight bars of the present invention. Second, even if the end plates could be equated with the bars, the cutting edge disclosed in *Hensley* does not project further than the bars. As can be seen clearly in Figures 2 and 10, the end plates project further than the cutting edge. Accordingly, claims 3 and 11 are patentable.

The Examiner asserts that claims 1-6 and 11-13 are unpatentable over *Hensley* in view of *Owens*. As discussed above, *Hensley* does not teach or suggest all the limitations of claim 1 or claims 2-19 which depend therefrom. *Owens* does not make up the deficiencies in *Hensley*.

There must be some motivation, teaching or suggestion to combine references. Here there is no motivation or suggestion to combine the crimping tool in *Owens* with the die of *Hensley*. *Hensley* is a cutting die which replaces the standard die of a crimping tool. The cutting die fractures a cable or wire. Conversely, *Owens* is a crimping tool for connecting two pieces of tube. One would not combine *Owens* with *Hensley* and to do so would render *Owens* unsuitable for its intended purpose. Specifically, the cutting tool is the opposite of a crimping device for joining. Including a cutting means in *Owens* would render it unsuitable for its

intended purpose – joining tubes. The cutting means would cause the two tubes to become separated or unjoined. Further, in *Hensley* the die of a crimping tool is replaced with the *Hensley* cutting tool and *Hensley* has structures, the end plates, to prevent deformation. Accordingly, one skilled in the art one would not combine *Owens* with *Hensley*.

As discussed in detail above, *Hensley* does not teach or suggest a tool with all the limitations of claim 1. *Hensley* does not teach or suggest a tool that has a sealing means in the form of a sleeve where at least one of the jaws has a bar which projects toward the other jaw and which makes indication in the sleeve, nor does *Hensley* teach or suggest a device where the cutting means makes the cutting indication in the sleeve and hose. *Owens* does not make up the deficiencies in *Hensley*. In particular, *Owens* teaches away from a cutting means as *Owens* is a crimping means for joining a piece of hose and a piece of tube, not separating hose. Thus, *Owens* teaches away from the present invention. Accordingly, claim 1 is patentable as are claims 2-19 which depend therefrom.

The Examiner asserts that claims 7-10 and 14-17 are unpatentable over *Hensley* and *Owens* in view of *Undin*. As discussed above, one skilled in the art one would not combine *Hensley* and *Owens*. There must be some teaching or suggestion to combine the prior art references. One skilled in the art would not combine *Undin* with *Hensley* and *Owens* as *Undin* is a crimping means for crimping two pieces of wire together. It is essential in *Undin* that the two elements being crimped together are in contact to establish a good electrical as well as mechanical connection. See, e.g. *Undin* at column 1, lines 23-25. Thus, one skilled in the art would not combine a crimping tool where it is essential to establish a good electrical and mechanical connection with a tool which severs the elements. Accordingly, one skilled in the art would not combine *Hensley* with, *Owens* and/or *Undin*.

As discussed above, *Hensley* and *Owens* alone or in combination do not teach or suggest all the limitations of claim 1. Claims 7-10 and 14-17 all depend from claim 1 and thus contain all the limitations of claim 1. *Undin* does not make up the deficiencies of *Hensley* and *Owens*.

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The inventive appliance includes a cutting means which projects toward the other jaw and makes a cutting indication in the sleeve. *Undin* does not teach or suggest an invention which makes a cutting indication. *Undin* teaches away from any cutting or cutting indication as good contact is essential. Further, none of the prior art of record teaches or suggests crimping by using at least one bar which projects toward the other jaw. Thus, claims 7-10 and 14-17 are patentable.

## **CONCLUSION**

Applicant asserts that all of the objections have been obviated and, therefore now respectfully requests withdrawal of the objections, and allowance of the application.

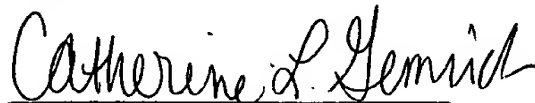
## **REQUEST FOR EXTENSION OF THE TERM**

Applicant respectfully requests an extension of the normal term which expired on November 29, 2002, for 3 month(s), to February 28, 2003.

Submitted herewith is a check for \$465 to cover the cost of the extension.

Any deficiency or overpayment should be charged or credited to Deposit Account Number 04-2219, referencing our Docket Number 11894.

Respectfully submitted,



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### VERSION OF CLAIMS WITH MARKINGS TO SHOW CHANGES MADE

1. An appliance for mechanical sealing of hollow hoses (2) of elastic material with a sealing means (3) which is made of plastically deformable material and which is applied to the hose, said appliance (1) having two jaws (8, 9), [which are] at least one of the jaws is movable towards and away from [each] the other jaw and [which, when moving towards each other,] the jaws crimp the sealing means (3) against the hose (2) to seal the same, characterised in that the sealing means (3) has the form of a sleeve (4) which is slipped on to the hose (2), that at least one of the jaws (8 or 9) has at least one bar (11) which projects towards the other jaw (9 or 8) and which, when at least one of the jaws [(8, 9) are] is moving towards [each] the other jaw, makes an indentation (12) in the sleeve (4) and the hose (2) to reinforce the sealing thereof as well as the fixing of the sleeve on the hose, and that at least one of the jaws (8 or 9) has a cutting means (13), which projects towards the other jaw (9 or 8) and which when at least one of the jaws (8, 9) [are] is moving towards [each] the other jaw, makes a cutting indication (14) in the sleeve (4) and the hose (2) to allow a sealing cutting of the hose (2).

18. An appliance according to claim 11, characterized in that  
the cutting edge (15) cooperates with an opposite recess (16) in the other jaw (9 or 8)  
and is situated substantially half way between two adjacent bars (11);

at least one of the jaws (8 or 9) has a fixture (17) to position the sleeve (4) and the  
hose (2) between the jaws (8, 9);

the bars (11) and the cutting edge (15) are situated on one jaw (8) and the fixture (17)  
is situated on the other jaw (9), the bars, the cutting edge and the fixture being mounted on or  
being made in one piece with the associated jaw,

the jaw (8) provided with the bars (11) and the cutting edge (15) has the form of a die,  
which is fixedly mounted in the appliance (1) and the jaw (9) provided with the fixture (17) has

the form of a punch, which is movably arranged in the appliance (1) and actuatable by a driving means (10); and

the appliance has the form of a pair of tongs (5) which is hand operated and has one fixed and one movable leg (6, 7), the movable leg (7) actuating the jaw (9) forming the punch by means of a gear drive.

19. An appliance according to claim 11, characterized in that  
the cutting edge (15) cooperates with an opposite recess (16) in the other jaw (8 or 9);  
the cutting edge (15) is situated on one side of the bars (11);  
at least one of the jaws (8 or 9) has a fixture (17) to position the sleeve (4) and the hose (2) between the jaws (8,9);  
the bars (11) and the cutting edge (15) are situated on one jaw (8) and the fixture (17) is situated on the other jaw (9), the bars, the cutting edge and the fixture being mounted on or being made in one piece with the associated jaw;

the jaw (8) provided with the bars (11) and the cutting edge (15) has the form of a die, which is fixedly mounted in the appliance (1) and the jaw (9) provided with the fixture (17) has the form of a punch, which is movably arranged in the appliance (1) and actuatable by driving means (10); and

the appliance has the form of a pair of tongs (5) which is hand operated and has one fixed and one movable leg (6, 7), the movable leg (7) actuating the jaw (9) forming the punch by means of a gear device.

20. An appliance for mechanical sealing of hollow hoses (2) of elastic material with a sealing means (3) which is made of plastically deformable material and which is applied to the hose, said appliance (1) having two jaws (8, 9), both of the jaws are movable towards and away from each other and which, when moving towards each other, crimp the sealing means (3) against

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the hose (2) to seal the same, characterised in that the sealing means (3) has the form of a sleeve (4) which is slipped on to the hose (2), that at least one of the jaws (8 or 9) has at least one bar (11) which projects towards the other jaw (9 or 8) and which, when the jaws (8, 9) are moving towards each other, makes an indentation (12) in the sleeve (4) and the hose (2) to reinforce the sealing thereof as well as the fixing of the sleeve on the hose, and that at least one of the jaws (8 or 9) and which, when the jaws (8, 9) are moving towards each other, makes a cutting indication (14) in the sleeve (4) and the hose (2) to allow a sealing cutting of the hose (2).

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